ABSTRACT OF THE DISCLOSURE

[0053]   An API (Application Programming Interface) for an adaptive computing system (ACS) may be used to create a system for performing an application on different types of ACS platforms. The API may be used to generate a system object including a host and a number of nodes and channels. A system data structure is created which describes the nodes, which may be FPGA (Field Programmable Gate Array)-based ACS accelerator boards. The API may enable source-code porting and scaling from small research platforms to larger field-deployable platforms.